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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,250	07/24/2001	Hans Groeblacher	2309.1004-000	4124

21005 7590 12/04/2003

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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,250

Applicant(s)

GROEBLACHER ET AL.

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 7-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Claims 1-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** indication of traverse in Paper No. 7.

Information Disclosure Statement

2. The information disclosure statement filed 1/16/02 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP 609. It has been placed in the application file and the information referred to therein has been considered as to its merits.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not properly identify the mailing address of James W. Nixon. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. The mailing address is incorrect because Mr. Nixon's initialed alteration of his residence (to which the mailing address is indicated the same as) included the addition of a new residence, but did not cross out the old residence, leading to an improper residence. See 37 CFR 1.63(c) and 37 CFR 1.76.

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Specification

4. The disclosure is objected to because of the following informalities: **a)** the word "using" is erroneously inserted at line 20 of page 4, to correct this "view of an extrusion using where the" should be changed to --view of an extrusion where the--; **b)** the screws, described at lines 11-13 of page 6, for adjusting plate 60 are screws 82, therefore "screws 84" at line 11 should be changed to --screws 82--; and **c)** the bolts, described at lines 12-14 of page 8, for holding plate 70 in a desired position are bolts 84, therefore "bolts 82" at line 12 should be changed to --bolts 84--.

Appropriate correction is required.

Claim Objections

5. Claims 7 and 17 are objected to because of the following informalities: **a)** the end of claim 7 requires a period "." to indicate the claims conclusion, to correct this "a first transverse axis" should be changed to --a first transverse axis.--; **b)** in line 2 of claim 17, "a extrusion" is grammatically incorrect, the Examiner suggests changing this to --an extrusion--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevens (3,221,371).

Stevens teaches an extrusion die (Fig 2) having a bushing plate (Fig 2, #54) having a flow path therein shaping an exterior profile of melt flowing therethrough (col 3, lines 8-12); a profile pin (Fig 2, #27) within the flow path of the bushing plate (Fig 2, #54) shaping an interior profile of the flowing melt; a first adjustment plate (Fig 2, #18) facing the bushing plate (Fig 2, #54) and surrounding the profile pin (Fig 2, #27) and moveable in a direction transverse to the flow of the melt (col 2, lines 18-22) to provide a shift of the non-circular cross-sectional profile of the flowing melt (Figs 6 and 7; col 1, lines 39-41 and col 2, lines 14-17), movement of the first adjustment plate being restricted to prevent rotation relative to the bushing plate (col 2, lines 18-22, the screws are for centering, rotating would not be possible with the screws as taught); a first section defining a flow path to maintain the circular cross-sectional profile interior of the flowing melt (Fig 1, #46, the shank is circular in cross section and will impart that interior to the melt flow, col 2, line 64 - col 3, line 34; although there is no antecedent basis for "the circular cross-sectional profile" the Examiner interprets the invention such that the melt flow has a circular interior profile within die before being completely shaped); a second section (Fig 2, the upper end portion of #27 serves to change the shape of the interior of the melt flow) defining a flow path to shape the circular melt interior to the desired non-circular cross-sectional profile interior of the flowing melt and a third section (Fig 2, the lower end portion #29 of #27) defining a flow path to maintain the desired non-circular cross-sectional profile interior of the flowing melt.

8. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Ballocca (4,765,936).

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Ballocca teaches a bushing plate (Fig 9, #11; the Examiner interprets a bushing plate as any plate that has the structural limitations further set forth in the claim) having non-circular cross-sectional surfaces (Fig 5, #s 12 and 13) defining a flow path through the bushing plate to maintain the desired non-circular cross-sectional profile therethrough; and opposing protrusions (Fig 5, #16) at a distal end from a face of the bushing plate defining at a distal end an adjustment channel (the limitation "which receives shoulders of a first adjustment plate and locates the first adjustment plate therein to prevent rotation of the first adjustment plate relative to the bushing plate" has no weight in the claim because the claimed invention is towards a bushing plate and an adjustment plate is not part of a bushing plate, rather it is a separate structure merely usable with the bushing plate; the adjustment plate amounts to an intended use of the bushing plate).

9. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Kessler (4,181,487).

Kessler teaches a bushing plate (Fig 1, #34 and Fig 6, #34c; the Examiner interprets a bushing plate as any plate that has the structural limitations further set forth in the claim) having non-circular cross-sectional surfaces (Figs 1 and 2, #36) defining a flow path through the bushing plate to maintain the desired non-circular cross-sectional profile therethrough; and opposing protrusions (Fig 1 and Fig 6, at the interface between #34c and #34d; the grooves in each end face that form channels with adjacent plates are formed by the protrusions shown) at a distal end from a face of the bushing plate defining at a distal end an adjustment channel (the limitation "which receives shoulders

of a first adjustment plate and locates the first adjustment plate therein to prevent rotation of the first adjustment plate relative to the bushing plate" has no weight in the claim because the claimed invention is towards a bushing plate and an adjustment plate is not part of a bushing plate, rather it is a separate structure merely usable with the bushing plate; the adjustment plate amounts to an intended use of the bushing plate).

10. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Kessler (4,181,487).

Kessler teaches a first adjustment plate (Fig 1, #34 and Fig 6, #34d; the Examiner interprets a first adjustment plate as any plate that has the structural limitations further set forth in the claim) having non-circular cross-sectional surfaces (Figs 1 and 2, #36) defining a flow path through the bushing plate to maintain the desired non-circular cross-sectional profile therethrough; shoulders (Fig 1 and Fig 6, at the interface between #34d and #34e; the grooves in each end face that form channels with adjacent plates are formed by the shoulders that protrude to form the groove) at a proximal end from a face of the first adjustment plate (the limitation "moveable within an adjusting channel of a bushing plate to prevent rotation of the first adjustment plate relative to the bushing plate" has no weight in the claim because the claimed invention is towards a first adjustment plate and a bushing plate is not part of a first adjustment plate, rather it is a separate structure merely usable with the bushing plate; the bushing plate amounts to an intended use of the first adjustment plate); opposing adjusting channels (Fig 1 and Fig 6, at the interface between #34c and #34d; the grooves in each end face that form channels with adjacent plates are formed by the protrusions shown)

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from a distal face (the limitation "which receive shoulders of a second adjustment plate and locate the second adjustment plate therein to prevent rotation of the second adjustment plate relative to the first adjustment plate" has no weight in the claim because the claimed invention is towards a first adjustment plate and a second adjustment plate is not part of a first adjustment plate, rather it is a separate structure merely usable with the first adjustment plate; the second adjustment plate amounts to an intended use of the first adjustment plate).

11. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Ballocca (4,765,936).

Ballocca teaches a second adjustment plate (Fig 9, #11; the Examiner interprets a second adjustment plate as any plate that has the structural limitations further set forth in the claim) having non-circular cross-sectional surfaces (Fig 5, #s 12 and 13) defining a flow path through the second adjustment plate to maintain the desired non-circular cross-sectional profile therethrough; and opposing shoulders (Fig 5, #16) at a proximal end from a face of the second adjustment plate (the limitation "moveable within adjusting channels of a first adjustment plate to prevent rotation of the second adjustment plate relative to the first adjustment plate" has no weight in the claim because the claimed invention is towards a second adjustment plate and a first adjustment plate is not part of a second adjustment plate, rather it is a separate structure merely usable with the second adjustment plate; the first adjustment plate amounts to an intended use of the second adjustment plate).

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12. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Kessler (4,181,487).

Kessler teaches a second adjustment plate (Fig 1, #34 and Fig 6, #34c; the Examiner interprets a second adjustment plate as any plate that has the structural limitations further set forth in the claim) having non-circular cross-sectional surfaces (Figs 1 and 2, #36) defining a flow path through the second adjustment plate to maintain the desired non-circular cross-sectional profile therethrough; and opposing shoulders (Fig 1 and Fig 6, at the interface between #34c and #34d; the grooves in each end face that form channels with adjacent plates are formed by the shoulders that protrude to form the groove) at a proximal end from a face of the second adjustment plate (the limitation "moveable within adjusting channels of a first adjustment plate to prevent rotation of the second adjustment plate relative to the first adjustment plate" has no weight in the claim because the claimed invention is towards a second adjustment plate and a first adjustment plate is not part of a second adjustment plate, rather it is a separate structure merely usable with the second adjustment plate; the first adjustment plate amounts to an intended use of the second adjustment plate).

13. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al (5,989,466).

Kato et al teach an apparatus for shaping a non-circular cross-sectional profile (Fig 3) having means for injecting the circular melt (Fig 1, #s 22, 22A and 21; col 10, lines 1-48) into an extrusion die (Fig 1, #25) (although there is no antecedent basis for "the circular melt" the Examiner interprets this "means for" limitation as a structure or its

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equivalent, such as a pipe, for delivering a melt to an extrusion die, wherein the surface delivering the melt is cylindrical); means for transforming the circular melt into a non-circular cross-sectional profile (Fig 2, #s 29 and 30; the Examiner interprets this "means for" limitation as a structure or its equivalent, such as molding plates, that reshape previously circular melt into a non-circular melt by adjusting the opening through which the melt travels); and means for adjusting the wall thickness of the non-circular cross-sectional profile (col 12, lines 7-19; the Examiner interprets this "means for" limitation such that at least a part of the structures that transform the melt are themselves movable or adjustable so that the wall thickness of the melt shaped therethrough is adjusted).

14. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Moriyama (4,867,667).

Moriyama teaches an apparatus for shaping a non-circular cross-sectional profile (Fig 1, #s 10 and 11) having means for injecting the circular melt (Fig 1, #s 1 and 2; col 2, lines 23-35) into an extrusion die (Fig 1, #3) (although there is no antecedent basis for "the circular melt" the Examiner interprets this "means for" limitation as a structure or its equivalent, such as a cylinder, for delivering a melt to an extrusion die, wherein the surface delivering the melt is cylindrical); means for transforming the circular melt into a non-circular cross-sectional profile (Fig 1, # 3; the Examiner interprets this "means for" limitation as a structure or its equivalent, such as molding plates, that reshape previously circular melt into a non-circular melt by adjusting the opening through which the melt travels); and means for adjusting the wall thickness of the non-circular cross-

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sectional profile (Fig 1, #3; the Examiner interprets this "means for" limitation such that at least a part of the structures that transform the melt are themselves movable or adjustable so that the wall thickness of the melt shaped therethrough is adjusted; in this reference the product has a wall thickness that changes along its length such that the differing thicknesses form a spiral).

15. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Arima (5,162,090).

Arima teaches an apparatus for shaping a non-circular cross-sectional profile (Fig 9, #A2') having means for injecting the circular melt (Fig 1, #1; col 3, lines 11-38) into an extrusion die (Fig 1, #8) (although there is no antecedent basis for "the circular melt" the Examiner interprets this "means for" limitation as a structure or its equivalent, such as a cylinder, for delivering a melt to an extrusion die, wherein the surface delivering the melt is cylindrical); means for transforming the circular melt into a non-circular cross-sectional profile (Fig 1, #8; the Examiner interprets this "means for" limitation as a structure or its equivalent, such as molding plates, that reshape previously circular melt into a non-circular melt by adjusting the opening through which the melt travels); and means for adjusting the wall thickness of the non-circular cross-sectional profile (Fig 1, #8 and col 4, lines 9-32; the Examiner interprets this "means for" limitation such that at least a part of the structures that transform the melt are themselves movable or adjustable so that the wall thickness of the melt shaped therethrough is adjusted; in this reference the movement of the die plate (#8) works with the extrusion rate to control the wall thickness).

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Allowable Subject Matter

16. Claims 7-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if all other claim objections are also corrected.

17. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or suggest the movement of the first adjustment plate of the invention of claim 6 being restricted to be along a first transverse axis; fails to teach opposing protrusions at a distal end from a face of the bushing plate defining an adjustment channel which receives shoulders of the first adjustment plate (the Examiner interprets "a first adjustment plate" of lines 6-7 of claim 8 as the same first adjustment plate as the first adjustment plate claimed at line 6 of claim 6); and fails to teach first, second and third bushing plates used to maintain circular, shape to non-circular and maintain non-circular, profile exteriors respectively. The closest prior art, Stevens (3,221,371), teaches the movement of the first adjustment plate to not be restricted to be along a first transverse axis, but rather to be able to move along two orthogonal axes and also teaches the exterior of the flowing melt to always be non-circular (Figures 6 and 7). Since the movement of the adjustment plate of Stevens is for centering means, a restriction along one axis would prevent centering and a protrusion/shoulder arrangement that restricts along one axis and prevents rotation would thereby also prevent centering.

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Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295 (after 12/8/03 the Mr. Del Sole's new number is (571)272-1130). The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457 (after 12/8/03 Ms. Walker's new number is (571)272-1151). The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S Del Sole

J.S.D.

November 24, 2003